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ABSTRACT

The nature of education needed in the future is discussed with particular reference to those in the physical and health education fields. Anticipating great social change in the course of the next two decades, the role of the physical education teacher is regarded as an expanding one. Three stages of development in curriculum for these teachers are proposed. The goal for the first stage is to use competency based teacher education as a tool for strengthening the best elements of the traditional curriculum. The key factor in the second stage of change is to accept specialization as a necessity, and to include in the undergraduate experience instructional models in role definition and decision making. Specialists with different activity competencies and capabilities for teaching all age groups and persons of widely variant capabilities will be needed. The final stage of development for competent teachers will be preparing professionals who have diverse talents and varying skills, who are well qualified to live and work in a society that is globally interdependent, and who can contribute services attuned to unlimited multiethnic and polycultural differences. (JD)

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FUTURE PROJECTIONS FOR PROFESSIONAL PREPARATION*

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The needs of persons and the character of the cultures surrounding them influence the natures of educational institutions and shape the roles of teachers. As Theodore Sizer[1] points out,

> Teacher education is thus fourth in line: One cannot plan for the training of educators in the 1980s without prior consideration of children, the culture, and the schools.

Studying the future has become more than an intriguing hobby and recreational activity; it is an increasingly respected professional specialization. While the specifics are debated vigorously, few of us have any genuine doubt that dramatic changes should be anticipated in population, lifestyles, health, food, habitats, energy and natural resources, communications and technology. It seems reasonable that changes in these aspects of human affairs should be accompanied by significant changes in business, government, international affairs, work and careers, human values and education.

What will be the nature of education needed in the near future? In a bicentennial feature in The Futurist, Harold Shane[2] discusses "America's Educational Futures 1976-2001." He summarizes the conclusions of a panel of 50 distinguished world citizens and educators, supplemented by a panel of 96 high school students. He lists twelve points on the subject of education on

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* A paper presented to the Southern District of the American Alliance for Health, Physical Education and Recreation, Little Rock, Arkansas, February 25, 1978.

1 Theodore R. Sizer, "Teacher Education for the 1980s, "New Perspectives on Teacher Education, Donald J. McCarty (Ed.). San Francisco: Jossey-Bass, 1973. pp. 40-52.

2 Harold G. Shane, "America's Educational Futures 1976-2001," The Futurist X:5 (October 1976). pp. 252-257.

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which most panelists agreed: emphasis on individual differences, flexibility of instructional techniques, education as a continuing lifelong process, self-directed learning, education as transcending schooling, changing patterns of home-school relations, worldwide continuing educational opportunities for both mature (past 30) and senior (past 60) learners, a spirit of global community based on planned interdependence and dynamic reciprocity, occupational education as transcending vocational education, problem-preventing education begun in early childhood rather than compensatory education at a later time, instruction emphasizing socially useful service in maintaining the biosphere and achieving a balance between humans and their environment, and "human geography" or a grasp of planetary cultures as they exist today.

> In summary, emergent educational development, 1976-2001, presumably would help young learners acquire a knowledge of the realities of the present, an awareness of alternative solutions, an understanding of consequences that might accompany these options, development of insights as to wise choices, and help U. S. youth to develop the skills and to acquire the information that are prerequisite to the implementation of examined ideas, policies, and programs. In short, five terms to remember in developing new curricula are: realities, alternatives, consequences, choices, and implementation![3]

What competencies will professionals in our fields need by the year 2000? Clearly, it will be a different world. Much of what we are offering today in our professional programs will be useless before today's college and university freshmen could hope to earn tenure. Consider, for example, a world in which 150,000 pound reusable spaceships will ferry people and equipment to a nebula of space stations, sky labs and satellites; engineers will exploit the outer-space environment to manufacture a host of new medical and industrial products; the craft will orbit the earth for up to 30 days from as far out as 500 miles and glide back to earth without engine power. NASA expects to have five such shuttles

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[3] Ibid., p. 257.

by 1980 that will loft people and cargo into orbit on a weekly basis.[4] You will be able to purchase cargo space on government-operated shuttles for $3000 to $10,000 per five cubic feet. It is anticipated that the shuttle will spark a new industrial revolution in medicine, communications, energy, material sciences, meteorology and cosmic tourism. In 1983 the shuttle will put into orbit a solar-powered telescope which will enable scientists to gaze seven times deeper into space than ever before. Picture a world in which people a continent apart will be able to talk by walkie-talkie at ten cents per minute, in which shuttle-launched satellites will collect solar energy and beam it back to earth for conversion into electricity.

Try to imagine what demands such a world will place upon educators. How will all of this modify health education curricula and public health services? Will professionals in recreation and leisure studies be directly involved in the development of cosmic tourism or in planning for leisure opportunities aboard space labs? What will the sports and fitness programs of health spas, country clubs, and public agencies be like? What will we expect of physical educators, coaches, trainers, physiologists, kinesiologists, and researchers in perceptual-motor development and learning? How can we possibly revamp professional preparation drastically enough or rapidly enough?

Teacher education in this country is in turmoil.[5]

> Some critics say its problems are so profound that improvement is impossible. Lethargy, bureaucratic tangles, financial cutbacks, and political power structures all stand in the way of urgently needed changes.

David L. Clark of Indiana University opened the 1977 annual meeting of the American Association of Colleges for Teacher Education by predicting a five- to seven-year

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[4] Paul W. Hoffman, "How the Space Shuttle Will Improve Our Lives," Family Weekly October 16, 1977. p. 14.

[5] Donald J. McCarty and Associates, New Perspectives on Teacher Education. San Francisco: Jossey-Bass, 1973. Jacket.

recession for teacher education with possibly ten percent of the less prosperous colleges closing their doors.[6]

> Innovative programs of teacher preparation may no longer be deemed financially feasible, and doctoral programs will be hard pressed for adequate funding. Institutions will fall to a new "margin of mediocrity"; conservatism and defensiveness will be the order of the day.

In spite of this pessimistic prediction, Clark[7] believes the recession need not occur. He reminds us that futures are "mutable and manipulable." He concludes:[8]

> This must be a period in which quality and excellence of teacher education performance are emphasized more strongly than ever before. Our ability to influence national-level planners and higher education administrators and to take advantage of opportunities that will arise in the near future depends on it.

Can professional preparation be changed so as to be more congruent with our future needs? Can we determine which understandings, abilities, and skills professionals will need in the future and guide the students in our preparation programs in developing these competencies? Surely, it's worth another try. There have been some good efforts in the past -- the LaPorte[9] beginning in the 1920's, the Jackson Mills[10] report in 1948, the AAHPER Professional Preparation Conferences[11,12]

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6 Reported by Robert W. Cole, Jr., "Teacher Education Under Pressure," Phi Delta Kappan 58:9 (May 1977). p. 666.

7 David L. Clark, "The Real World of the Teacher Educator: A Look to the Near Future," Phi Delta Kappan 58:9 (May 1977). pp. 680-685.

8 Ibid., p. 685.

9 William R. LaPorte, The Physical Education Curriculum. Los Angeles: University of Southern California Press, 1928.

10 National Conference on Undergraduate Professional Preparation in Physical Education, Health Education, and Recreation (Chicago: The Athletic Institute, 1948).

11 AAHPER. Professional Preparation in Health Education, Physical Education, and Recreation Education. Washington, D.C.: The Association, 1962.

12 AAHPER. Graduate Education in Health Education, Physical Education, Recreation Education, Safety Education, and Dance. Washington, D.C.: The Association, 1967.

held in Washington in 1962 and 1967, and the New Orleans[13] conference in 1973. These efforts have led to improvements in some of our programs; but the net impact, at least in terms of any real accommodation to the needs projected for Century 21, has been minimal.

Perhaps this is because we have failed to conceptualize the total task. We certainly need to put more energy into clarifying the goals for our profession at the turn of the century, describing the roles we should be filling, and identifying the competencies which will be required. At the same time, we need to analyze how we can move our personnel and our institutions from where we now are to where we want to be. I suspect that some of our most painful failures have resulted from the fact that we never identified the steps from here to there; we attempted the quantum leap from the traditional to the futuristic ideal.

It might help to look at our profession in a developmental context. I submit that we are a profession, at least on the threshold of adulthood. The concept of adult development has been popularized recently by Gail Sheehy[14] in her 1976 book, Passages. She applies the concept of developmental tasks throughout adult life, discussing the predictable crises with which most of us will have to deal as our lives progress from one stage to the next. It may well be that certain crises in the continuing development of an adult profession are predictable. At least we can conceptualize some intermediate stages between what we are now and what we hope to become by 2000. I am proposing that we take a developmental look at our profession. I am not asking you to analyze your development as an individual adult professional from high school graduation to retirement. I am suggesting that we consider the predictable adult crises in the future development of our profession as a whole.

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13 AAHPER. Professional Preparation in Dance, Physical Education, Recreation Education, Safety Education, and Health Education. Washington, D.C.: The Association, 1974.

14 Gail Sheehy, Passages, E. P. Dutton: New York. 1976.

Where are we now? I think most of us are in somewhat of a muddle. We have no consensus on what kinds of knowledge shall serve as bases in designing professional preparation curricula. We are thoroughly confused as to what represents balance in the curriculum among skills, concepts and attitudes, between general education and specialized professional education, within broad general education areas, between independent self-instruction and interdependent socialized instruction. We are deeply enmeshed in the difficulties surrounding mandated competency-based education and the politics relating to certification, accreditation and legislated cost effectiveness. We must start somewhere.

My proposal conceptualizes four stages in the adult development of our profession. Sheehy tells us, as did others before her in a less dramatic style, that men and women continue growing up adult from 18 to 50 and beyond. There are crises or points of turning all along. With each passage from one stage of human growth to the next, we must shed a protective structure. This leaves us particularly vulnerable until we can give up the old patterns of behavior, be comfortable without the familiar "security blanket," accept new responsibilities and a changed self-image, and regain equilibrium as we come out of each passage. I propose to apply this same developmental approach to projecting the future of professional preparation. Instead of the trying twenties, the catch-thirties, the forlorn forties, and the refreshed or renewing fifties, I'll try to sketch the accountable seventies, the extending eighties, and the midlife passage of our profession in the synthesizing nineties to the frightening but challenging excitement of our future by the year 2000.

How shall we face up to the developmental tasks of stage one? I suggest that the most effective way to deal with the seventies crisis is to embrace competency-based teacher education wholeheartedly, to get on with the task of defining the competencies needed to perform adequately in the teacher's role

according to current expectations, and to accept responsibility for developing sound CBTE programs and preparing teachers who can demonstrate the desired competencies. In short, the goal for stage one is to use CBTE as a tool for strengthening the best elements of our traditional curriculum, for doing a better job of those aspects of professional preparation to which we have given primary emphasis for almost fifty years. There must be some merit in this concept of good teaching or it wouldn't have withstood frequent and diverse efforts for change for so long.

Good cases have been made both for and against CBTE. A competency based program "outlines the specific competencies or skills to be demonstrated by the student, provides instructional alternatives to facilitate the student's progress, and holds the student accountable for the achievement of the specified goals."[15] CBTE has excellent potential for personalization of learning experiences and increased motivation of students. It offers all involved persons opportunity to participate in program design. It provides specific criteria by which to measure success or failure. Teachers can agree on essential generic competencies.[16] It can succeed, even in a situation as complex as the New York State system in which virtually all of the 300 elementary and special education programs have made the shift to CBTE since 1975 and are now state-approved.[17]

Competency based teacher education does have difficulties. The most crucial of these can be overcome by careful consideration of local guidelines for stating competencies and selecting criteria. For those of you who still have reservations about significant concerns with which CBTE cannot yet cope -- and I share your uneasiness -- try to look at it as a first step. Many of us will soon be adopting

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15 James M. Cooper, M. Vere DeVault, et al., Competency Based Teacher Education. McCutchan: Berkeley, 1973. Jacket.

16 Charles Dziuban and Timothy J. Sullivan, 'Teaching Competencies: An Investigation of Emphasis," Phi Delta Kappan. 59:6 (February, 1978). pp. 422-424.

17 Ralph L. Spencer and William E. Boyd, "CBTE is Succeeding in the State of New York," Phi Delta Kappan. 58:9 (May, 1977). pp. 677-679, 687.

CBTE whether or not we make a positive choice. At the very least, it will help teacher educators within each institution to "put our own houses in order." It will strengthen our profession by giving us a common base and improving our ability to articulate what we are about, at home and with others in the profession. When we are comfortable at stage one -- and we can do this by 1980 if we take the positive approach and get on with it -- then we will have a solid base which represents improved performance of the things we have been emphasizing right along and we will be ready to move from the accountable seventies to the extending eighties.

Some of us are already comfortable with the competency approach and are seeking means to negotiate passages to stage two. What is needed next is, not so much a dramatically different concept of teaching, but the professional maturity to extend role definitions and the personal security to explore new ways of making the process of education more successful and more rewarding, to all learners, in all roles.

Acceptance of the reality of specialization is a key factor in progressing through stage two. Diversification of roles makes specialization both possible and essential. Educators do enjoy different roles and responsibilities. Students in undergraduate professional curricula must be helped to define the spectrum of educational leadership roles and to make their individual choices from among the viable alternatives. Instructional modules in role-definition and decision-making should be included within the undergraduate experience. We need specialists with different activity competencies and capabilities for teaching different age groups. We need educators to work with the preschooler, the elderly, the disabled, the handicapped, the retarded, the bilingual, the urban ghetto dweller, the rurally isolated. We need paraprofessionals to serve as teacher aides, audio-visual technicians, equipment specialists, computer programmers.

Furthermore, we need to prepare ourselves to work with an increasingly wide range of professionals in other fields as we help to convert school systems into educational systems. By 1990, graduates of our professional programs need to be able to work effectively on a regular basis with individuals in the other public service professions -- public health agencies, social welfare agencies, community recreation agencies, and the mass-media. Mario Fantini[18] urges that, to convert a school system into an educational system, we must link the schools

> ...to the business and industrial environment for talent development, to the health agencies for nutritional awareness and drug education, to insurance companies for driver training, to the artistic network for cultural and aesthetic literacy, and to the spiritual leaders for moral and ethical actualization....

Educators must also redefine roles in relationships with parents, elected community officials, and other taxpayers; modifications of professional preparation to meet these demands will be required.

Each student in a stage two professional preparation program will select an appropriate specialization. Probably a "go, no go" assessment of students in terms of the planned specialization will be provided by the end of the second year of college. Those not opting for teaching careers will have a wide range of open options in related career fields. Additional coursework, the internship experience and post-baccalaureate service will all focus on greater competency for service through the chosen specialty. Educators will devote a great deal more study to techniques for modifying behaviors of learners, a great deal more practice to those teaching behaviors selected as effective for individual teaching styles, a great deal more time to experimentation with procedures for eliciting creative behavior in learners and for influencing attitudes in desired directions. The message to the individual aspiring toward an HPER-related career will be

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18 Mario D. Fantini, "Toward a Redefinition of American Education," Leadership. 35:3 (December, 1977) pp. 167-172.

specialize; learn well the competencies associated with your specialty; seek ways of excelling within the role and of extending quality performance and human service through further definition of a unique role. The message to the institution is to identify particular specialities for which superior preparation can be provided; it is ridiculous for each of us to try to be all things to all people; it is disastrous for all of us to compete for the same students.

Tight job markets are likely to continue. Consequently, we cannot afford to ignore the mundane, practical aspects of professional preparation. Skills we used to assume could be developed through on-the-job training may actually be essential to getting the first job. We need to make available instruction in job-seeking skills and job-keeping skills; such instruction should offer variations for diverse families of jobs.

Undergraduates need assistance in the preparation of a professional resume, writing letters of application, understanding procedures for seeking references, developing job interview skills, analyzing job offers, anticipating payroll deduction procedures, professional association demands, and in-service education expectations. We should ensure that they possess basic action research skills for self-directed efforts to increase performance effectiveness; communications skills for submitting purchase requests, preparing annual reports, making oral presentations to citizen groups, and reporting to the community through the local media; and some field experience in community service as well as teaching.

Graduate study for those who seek careers in higher education must ensure that the holder of an advanced degree has conducted research, has developed skills for independent research in a well-defined area of scholarly specialization, has published in one or two refereed journals, has had some successful experience in classroom presentations, is aware of tools and procedures for evaluating teaching effectiveness, has had opportunity for involvement in university and professional

association service. A new Ph.D. without these experiences has very little chance of developing his job-keeping skills within the time frame typically provided in academia. The new Ph.D. without this background who nonetheless aspires to a university career should carefully select a short-term non-tenure-track position in which he or she can gain this experience before putting herself or himself under the pressure of trying to make it up the academic ladder.

Institutions offering professional preparation should accept the responsibility of encouraging professional specializations other than teaching. We should familiarize students with other alternatives, permit flexibility for programs individually tailored to any viable specialty which a student desires to develop, create appropriate field experiences outside the typical public-school setting, modify exit competencies to fit diverse needs, substitute demonstrated competencies essential to alternative careers for the largely sterile masters comprehensive examinations and doctoral preliminary or qualifying examinations typically in use. Most important, we must get past the outdated notion that the pinnacle of success for current doctoral students will be found in a replication of the careers of their major professors. There are many promising careers outside university professorships for students holding advanced degrees in our fields. I hope that graduate students will choose these careers in increasing numbers and that our institutions will accommodate them with appropriate preparation.

To those young people who are still intent on careers in higher education, I recommend a current article by Jane Nitzsche[19] which takes the position that today's young professor must accept the system and can success within it by exerting his or her own academic free will. She advises you to research what the department or the university expects of you in much the same way you approach a scholarly problem, to anticipate devoting full time for the next several years

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19 Jane Chance Nitzsche, "How to Save Your Own Career," Change. 10:2 (February, 1978). pp. 40-43.

to advancing your career, just as you did in graduate school. The capsulation of "How to Save Your Own Career" reads:[20]

> From teaching to socializing to publishing, from classroom performance to locker-room politics, from proper dress to how to get the most out of a conference -- what every young professor needs to know to make it up the academic ladder.

Most of us will meet the challenges of stage one by 1980, in redefining professional roles in terms of competencies and in accepting accountability for development of these competencies. And most of our professional preparation institutions can succeed by 1990 with the stage two tasks of accepting the realities of specialization and diversification; gearing up to convert school systems to educational systems; providing in-depth preparation for selected specialties; and including job-seeking, job-keeping, and job-changing skills. Setting off on the midlife passage to stage three in the adult development of our professions will probably be the most frightening -- and the most difficult to achieve. A few of the professional preparation faculties represented here may already be facing this crisis; hopefully you will be able to share additional insights with the rest of us for whom the changes required are still in the future.

My predictions for our mid-life professional crisis project the need to "step back" for a broader professional perspective, to consolidate recent gains, to re-study the discipline, to re-analyze the purposes of education, to reexamine the meanings of our fields in the larger human world, to synthesize and revitalize what we are all about. We need to figure out how we will make an important difference in the lives of persons. We need to clarify our moral and professional commitment.

What should an education in the movement arts and sciences -- and in sport if you will -- mean to the individual in our society? There is truly a great deal more potential in our field than any of us realized a quarter of a century

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[20] Ibid., p. 40.

ago. In a sense, our discipline has something for everyone. The problem is to create new paradigms for seeing what we have not really seen before. It is important that we understand the different forms of meaning accessible through human movement phenomena. We need to consciously stimulate new levels of human awareness through movement experiences. We must gain more knowledge about right and left brain functioning, about "Self 1" and "Self 2," and "centering," and especially about effective approaches for utilizing these concepts to facilitate learning and enrich experience. Awareness of the body as self is a significant aspect of humanity.

As practitioners in the human service professions, we will need to be more knowledgeable about the total ecosystem in which we function. We need to be better analysts of both the natural and social aspects of our environment. Professional preparation must develop the skills for studying and understanding the "hidden curriculum" and provide for the competencies required to structure nurturing environments, to keep alive throughout life the desire for learning, to motivate participation in self-renewing physical activity indefinitely.

How will we clarify our moral and professional commitment? Techniques and skills of value clarification should be introduced early in professional preparation. I believe our profession should accept a moral commitment to make known the total range of opportunities for human development through the movement arts and sciences. For too long, we have spoken chiefly to and for the adolescent male athlete striving to realize his dominant self-image as a successful varsity athlete, perhaps with a dream of a professional athletics career. Surely a pluralistic society requires different kinds of commitments in its professionals.

The most difficult stage three challenge for those of us responsible for designing and strengthening professional preparation programs is to give

intelligent and creative attention to the whole. As Margaret Lindsey[21] has put it, "inadequate work is being done on education, and training is being subjected to overkill."

> An important aspect of the problem is failure to provide reasonable balance in the constant flow of experience back and forth between teaching as an expression of the self in a real setting and activities designed to increase specific skills....There is a frightening absence of curriculum designers, in contrast to the great number of materials producers.
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> A designer treats the whole, giving attention to form, emphasis, balance, articulation, continuity, internal consistency, and unity. The need for attention to the whole is urgent.

It may appear that I am debating both sides of the argument for competency-based education; but I do not believe I am inconsistent. I have urged that we utilize CBTE as a first step, in order that we can get on with what we have been claiming we do for many years. At the same time, I have pointed out that we must use care in defining competencies so as to prevent a narrowness of training. Most important, we must view this approach as a base for moving ahead to more difficult and more significant changes in professional education.

For those of us who successfully negotiate the midlife passage, what lies beyond? I envision a time when we will prepare professionals of a totally different kind, individuals who develop diverse talents and widely varying skills, persons well-qualified to live and work in a world of change and ambiguity, professionals committed to and prepared for service in a post-industrial, technologically advanced, biospherically deteriorating, pluralistic and ethnically conscious, globally interdependent society. In all probability, we will need professionals oriented toward education as a problem-preventing enterprise, a complex of socially useful services, attuned to unlimited multi-ethnic and polycultural differences. Our professional preparation curricula

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21 Margaret Lindsey, "Curricular Developments," New Perspectives on Teacher Education, Donald J. McCarty and Associates. Jossey-Bass: San Francisco, 1973. pp. 186-187.

will reflect a commitment to occupational education as transcending vocational education; they will be designed to give major emphasis to in-service education in contrast to pre-service preparation.

The view that problem-preventing education should displace compensatory education will prevail. The activity content of our programs will shift from the mastery of specific competitive sport skills to the development of positive attitudes toward active recreation, requiring the acquisition of specific skills to be sure, but achieving recreationally satisfying skills in recreation settings selected by the individual participant. School programs will include instruction and practice in the techniques for learning new skills and helpful procedures for designing new games. Dynamic health education programs will focus on the prevention rather than the correction of significant health problems; health instruction will be designed to give top priority to the development of positive attitudes; the boundaries currently separating the domains of health education and physical education will be obliterated as we concern ourselves with achieving positive concepts of fitness and useful skills for reaching and maintaining individual fitness potentials. We will give more attention to body awareness activities, mechanically efficient body alignment, and the development of positive body images and concepts of the self in movement.

Instruction will emphasize socially useful service in maintaining the biosphere and achieving a balance between humans and their environment. We will develop hiking, jogging, and cycling trails with a view toward attracting people into a safe and self-renewing natural environment. We will use public funds not only to develop courses for orienteering, cross-country skiing, and fitness challenges, but also to provide instruction in appreciating and maintaining the environment and in wilderness survival. Our programs will emphasize movement education for children and physical activity for mature and senior

citizens; the open degree programs which will be heavily underwritten will include health and physical education requirements designed to meet the needs of older persons. Programs at all levels and in all areas will include instruction in the latest life-saving techniques.

Educational programs, both in and beyond schools, will be planned "to develop a spirit of global community -- of planned interdependence and dynamic reciprocity -- which represents multi-ethnic and polycultural differences both in the U. S. and abroad."[22]

What will be the role of human movement studies in Century 21 educational systems? I think the world will still depend on us for leadership in developing fitness. But fitness for life beyond the year 2000 will require some elements we have not emphasized. We'll need exercise regimens adaptable to long underseas voyages. We'll need to create aerobics activities which can be performed within remote space stations. Those persons who choose to spend most of their lives on the earth's surface will need to understand fitness as a human condition, a personal achievement, involving individual understanding, self-assessment, personal responsibility, and a continuing commitment. Those of us who wish to be fit for intergalactic travel will need daily exercise routines which can be performed on board the space shuttle for up to thirty days in orbit. Leaping great distances while maintaining life support systems seems a probable demand. Investion of appropriate types of spatial orientation activities will certainly be necessary. Robots, designed after C3PO and R2D2 of "Star Wars", could surely be called upon, not only to guide the shuttle, to keep it from burning up during reentry, and to guard continuously against malfunction, but also for constant monitoring of bodily functioning, for instant computerizing of individual exercise programs, and for ejecting printouts to eliminate errors in judgment in plotting moves from one surface crater to another or from a

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22 Shane, op. cit., p. 255.

suspended platform within a large satellite to a narrow entry space in the underbelly of a space vehicle.

The big professional debate among practitioners in our field has always been the one dealing with the ofttime competing claims for achieving physical fitness and developing motor performance skill. Both will continue to be important goals as we plan to improve our lives in a world in which human beings can exploit the outer-space environment. Motor performance skill will be no less desirable in tomorrow's world. But a major shift in emphasis can be anticipated.

Much as we physical educators have enjoyed football, field hockey, basketball, volleyball, baseball, and softball, they have never been all things to all people -- and they never will. People will always need performance skill; but we will need to accept responsibility for helping individuals to develop a much broader spectrum of motor performance abilities. We will need efficient body mechanics, understanding of optimum body alignment for long periods of sitting or standing or specific physical work tasks. We will need skills of conscious neuromuscular relaxation to renew enthusiasm and maintain productivity. We will need perceptual-motor training to help us evoke appropriate motor responses to an increasing variety of stimuli. We will need to adapt movement patterns to conditions of weightlessness, to develop new movement skills for tasks yet undefined, to condition ourselves for unfamiliar forms of stress. Tomorrow's physical education curriculum may include courses in weightless gymnastics, three-dimensional orienteering, balance and centering, human-spatial ecology, and re-entry survival. New games will surely emerge.

Fitness and performance have always been acknowledged goals of physical education. Both will continue to be important goals in the future. But the achievement of personal integration and the realization of that large cluster of potential values and meanings identified as transcendence which have been consistently neglected by physical education, may well become the major focus in tomorrow's curriculum.

You have all seen "Star Wars" and been introduced, with Lucas Skywalker, to "the force." The force (in this intergalactic fantasy) is an energy field surrounding all living things. It's potential is not unlike that of the fluid energy depicted by George Leonard in describing his experiences with akido. I believe it can be an acceptable symbol for the kind of transcendence or personal integration which educators might help citizens of tomorrow to seek through meaningful participation in movement activities, a kind of wholeness, oneness, at-homeness with self. The ultimate athlete will not depend on a laser beam sword; she or he will have discovered how to maximize human energy. He or she will experience physical activity in ways which make it possible to surpass previous physical limitations and to become a more integrated part of the universe.

What sorts of professionals will we need to help the citizens of the twenty-first century to employ the movement arts and sciences in enriching their lives? We will need educators who can open up new worlds to students of all ages and individualize programs so that each student will be successful in his or her search for wholeness and extended meanings. There should be jobs for anti-gravity activity specialists, for electronics games simulators, for supervisors of exercise programs for shuttle crews, for time and motion study experts for space lab maintenance teams, for space station fitness and recreation program coordinators, for geocultural perspective games creators, for underwater education program directors, and for SWEAT-walking instructors (self-sustaining weightless extraterrestrial altitude tightrope walking, the future equivalent of SCUBA-diving). We'll need space kinetics researchers, lunar physiology specialists, and investigators of the social psychology of space station colonists.

We'll probably still need some teachers too. Professional preparation for teachers will transcend vocational education. We will not be satisfied just to develop competencies of presentation, group organization, coaching, and testing;

but we will strive to stimulate the growth of abilities needed to help people appreciate the different meanings of movement, to give leadership in accepting physical activity as an essential aspect of a complete life, to contribute to identifying and researching the important questions relating to the movement sciences, and to seek creative fulfillment in the movement arts. Teachers should be prepared to assume the roles of relator, mediator, diagnostician, and choreographer. Education will not be confined to schools; but will present a smorgasbord of opportunity to all. Professional preparation will be more in-service than pre-service education. Professional education will be a continuing education through-out the years of full-time employment. There will no longer be "retired" educators; older persons who have concluded careers in a variety of occupations will contribute to educational programs on a part-time basis the diverse special skills and wisdom accumulated in a lifetime of active professional service.

I cannot claim to have achieved professional maturity as a futurist. I can only share with you projections based upon my own professionally rewarding experiences through several passages and past a few points of turning. I do know that we need courage, energy, faith, and above all a willingness to change, if our profession is to grow to its full adult potential. I have lived in this profession long enough to know that an occasional backward glance can help us to look ahead more creatively.

A long time ago in a galaxy far, far away, physical education was a special subject in the school curriculum. Very few people understood what was happening in a gymnasium where a female teacher was directing traffic patterns for 40 girls

at one end of the gymnasium and a male coach was supervising calisthenics for 35 boys at the other end. As a matter of fact, very little was happening. Young people took turns playing volleyball, basketball, and softball, except on Mondays when everyone watched the films of last Saturday's football game. Nobody thought physical education was very important. Boys and girls who were bored or humiliated by ball games could get out of required physical activity by making the varsity team, playing in the band, joining the drill team, or volunteering for ROTC.

A long time ago in that galaxy far, far away, these teachers earned certificates by accumulating the required numbers of course credits through four years of socialization in NCATE - accredited institutions. They attended lectures and wrote examinations in subjects which were classified as humanities, social sciences, biological sciences, and physical sciences. They read textbooks and completed credits in educational philosophy, educational psychology and the social foundations of education. They practiced skill drills in football, volleyball, basketball, and softball. They prepared notebooks for required methods courses in FB, VB, BB, and softball. Sometimes they also made notebooks in gymnastics, tennis, and aquatics, and card files of low-organized games. Those who were most conscientious in preparing notebooks and card files were rewarded with A's, approval for student teaching, and being spared the necessity of buying new books or reading current professional journals. They were also taught principles of physical education, alternative methods for taking roll, plans for organizing the locker room, the pros and cons of required uniforms, and sometimes even how to mark fields, -- usually by professors who hadn't been in an elementary or secondary school for at least 10 years.

But that was a long time ago in a far away galaxy. And today is the first day of the rest of our lives. Because we care about the rest of our lives, and the lives of others, tomorrow will be different. In less than two years we will come out of the accountable seventies. Ahead we can see the extending eighties.

It will soon be time to tune up for the synthesizing nineties. We have some difficult passages to negotiate; but we perceive, and we will persist and progress. Today is the first day of the rest of our lives. -- May the force be with you!